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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,231	12/18/2000	Jacek F. Gieras	60,469-031	4502

7590 06/05/2002
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EXAMINER

ELKASSABGI, HEBA

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,231

Applicant(s)

GIERAS ET AL.

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
Group I. Claims 1-9, drawn to method of making electric motor, classified in class 29, subclass 596.
Group II. Claims 10-19, drawn to structure of electric motor, classified in class 310, subclass 268.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process as claimed can be used to make a materially different product such as magnetic bearing, coupling, sensor, or clutch.
3. During a telephone conversation with David Gaskey (Registration # 37139) on May 23, 2002 a provisional election was made with traverse to prosecute the invention of Group II, claims 10-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-9 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 10, 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by DeCesare (U.S. Patent 4488075).

7. DeCesare illustrates in Figure 1 a two-stator core portions (20) with armature coils (24) arranged onto the stator central portions (20a) within the axial wall portions (20b and 20c) that are covering the coil with a core portion (20) and a rotor (16) comprised of permanent magnets (16). Figure 4 and 5 disclose a rotor (30) that includes

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a core structure (32). Whereas the rotor magnets and stator core portions interact during rotary movement. In regards to claim 19 the coil winding acts as a bonding agent.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeCesare (U.S. Patent 4488075) and in further view of Peck et al. (U.S. Patent 5223760) and Weh (U.S. Patent 5051641).

10. DeCesare illustrates in Figure 1 a two-stator core portions (20) with armature coils (24) arranged onto the stator central portions (20a) with in the axial wall portions (20b and 20c) that are covering the coil with a core portion (20) and a rotor (16) comprised of permanent magnets (16). Figure 4 and 5 disclose a rotor (30) that includes a core structure (32). Whereas the rotor magnets and stator core portions interact during rotary movement. However, DeCesare does not disclose support members that enclose part of the axial surfaces of the magnetic core portions and stator elements with slots located on the rotor core.

11. Peck et al. illustrate in Figure 2 stator elements (stator support elements) (24 and 26) with a plurality of slots (31), that are coaxially located with the rotor core (36), in order to utilize an axially compact design.

12. Weh discloses in Figure 1 magnetic cores (Mq1) supported by pole elements (support members) (W1' and W2'), for the purpose of greater flux concentration.

13. It would have been obvious to one of ordinary skill in the art to combine the reference of DeCesare with Peck et al. and Weh in order to receive greater flux concentration and to utilize an axially compact design.

14. Claim 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeCesare (U.S. Patent 4488075) and in further view of Lange et al. (U.S. 5777418).

15. DeCesare illustrates in Figure 1 a two-stator core portions (20) with armature coils (24) arranged onto the stator central portions (20a) with in the axial wall portions (20b and 20c) that are covering the coil with a core portion (20) and a rotor (16) comprised of permanent magnets (16). Figure 4 and 5 disclose a rotor (30) that includes a core structure (32). Whereas the rotor magnets and stator core portions interact during rotary movement. However, DeCesare does not disclose support members that enclose part of the axial surfaces of the magnetic core portions.

16. Lange et al. discloses in Figure 1 a stator core portion (stator element) (10a and 10b) comprised of sintered powder material (soft iron) (60) or permanent magnets (5), in order to offer an advantage of reducing floor gap while providing the same freedom on the floor.

17. It would have been obvious to one of ordinary skill in the art to combine DeCesare with Lange et al. in order to reduce floor gap while providing the same freedom on the floor.

18. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeCesare (U.S. Patent 4488075) and in further view of von Zwegbergk (U.S. Patent 5117142).

19. DeCesare illustrates in Figure 1 a two-stator core portions (20) with armature coils (24) arranged onto the stator central portions (20a) with in the axial wall portions (20b and 20c) that are covering the coil with a core portion (20) and a rotor (16) comprised of permanent magnets (16). Figure 4 and 5 disclose a rotor (30) that includes a core structure (32). Whereas the rotor magnets and stator core portions interact during rotary movement. However, DeCesare does not disclose support members that enclose part of the axial surfaces of the magnetic core portions.

20. von Zwegbergk illustrates in figure 2 stator elements made of laminated sheet metal, in order to produce at a higher efficiency.

21. It would have been obvious to one of ordinary skill in the art to combine DeCesare with von Zwegbergk in order for a higher level of efficiency of power.

Allowable Subject Matter

Claims 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

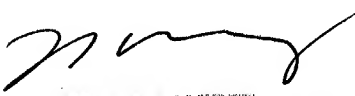
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HYE
June 3, 2002



NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800